

BRZHEZHINSKIY, Yu.I.

Effect of increasing the between-repairs period of ship operations on the amount of repairs. Trudy TSNILMF no.52:57-63 '63
(MIRA 18:1)

ACCESSION NR: AP4030650

S/0048/64/028/004/0717/0721

AUTHOR: Fousek, Ya.; Brzhezina, B.

TITLE: Frequency dependence of the motion of 90° domain walls in barium titanate /Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May to 5 June 1963/

SOURCE: AN SSSR. Izv. Ser.fiz., v:28, no.4, 1964, 717-721

TOPIC TAGS: ferroelectricity, domain wall, domain wall motion, 90° domain wall motion, barium titanate

ABSTRACT: The motion of 90° domain walls in barium titanate was observed in alternating fields at frequencies from 50 cycles/sec to 200 kilocycles/sec. The crystals investigated contained only one 90° wall or spike-shaped domain. Observation was by stroboscopic illumination. The alternating field was applied in short bursts to avoid overheating, and the lamp was so triggered with the aid of a delay line as to permit observation at any selected phase of the applied field. The motion of the domain wall was characterized by periods of rest at each end of the range (hysteresis). At low frequencies the domain wall would continue to move in one direction,

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only as long as the applied field continued to increase; the wall would come to rest as soon as the field began to decrease. At higher frequencies the forward motion of the domain wall would continue for a time after the field had begun to decrease, so that the phase of the domain wall motion lagged behind that of the applied field. The amplitude of the domain wall motion at fixed applied voltage decreased rapidly with increasing frequency. Other peculiarities of the motion were noted but are not described. A simple theory is developed to account for domain wall motion. This is based on concepts discussed elsewhere (J.Fousek and B.Brzhezina, Fizika tverdogo tela, 4, 1400, 1962). The motive force is a "pressure" within the domain proportional to the applied field and due to the interaction of this with the spontaneous polarization. There are two restoring forces: one is due to the excess compensation charge produced by the displacement of the wall, and the other has something to do with the effect of lattice defects on the surface energy of the domain wall. In addition to these, there is an inertial term, proportional to the acceleration and a damping term, proportional to the velocity. The inertial term can be large because, as E.A. Little (Phys.Rev., 98, 978, 1955) has shown, motion of 90° domain walls is accompanied by changes in the crystal dimensions, and hence by motions of large masses of matter. The damping term is presumed to arise from hysteresis and deformation losses due to the forced motion of 180° domain walls. The inertial term is neglected, and the

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damping term is evaluated from the decrease of amplitude with increasing frequency. The motion of the domain wall is calculated from the resulting equation and is compared with experiment. Reasonable agreement is found, but there are indications that the neglected inertial term may be important in some cases. "The authors express their gratitude to Ya.Katser, A.Fouskova, Z.Malek, V.Dvorzhak and V.Yanovets for valuable discussions, and to A.Glanets, V.Yanoshek and Z.Voyta for assistance with the apparatus." Orig.art.has: 6 formulas and 6 figures.

ASSOCIATION: Fizicheskiy institut Chekhoslovatskoy Akademii nauk (Physical Institute, Czechoslovakian Academy of Sciences)

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DATE ACQ: 30Apr64

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(A)

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AUTHORS: Nikolayev, R. P.; Tarutin, P. P.; Romanova, A. F.; Brzhezina, L. K. 21

ORG: none B

TITLE: Method for manufacturing a vitaminized animal fodder preparation. Class 30, No. 176043

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 41

TOPIC TAGS: food technology, commercial animal, vitamin, calcium compound, nicotinic acid

ABSTRACT: This Author Certificate presents a method for manufacturing a vitaminized animal fodder preparation containing vitamin A, molasses, and soybean meal. To insure complete vitaminization of the preparation, riboflavin (B₂), nicotinic acid (PP), and calcium pantothenate are dissolved in the molasses. Next, stabilized vitamin D is emulsified in the molasses, and vitamin B₁₂ and soybean meal are added to the mixture. The mixture is thoroughly mixed, crushed, and bagged.

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13/

HW
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UDC: 636.085:636.087.3:577.161.164

BRZHEZNISKIY, I.

Deductions from the indivisible funds of collective farms. Den.
1 kred. 20 no. 8:61-63 Ag '62. (MIRA 15:9)

1. Kreditnyy inspektor Teleneshtskogo otdeleniya Gosbanka
Moldavskoy SSR.
(Teleneshty District—Collective farms—Finance)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100																									
BRZHEZINSKIY, M.L.																									
27																									
Use of a Parametric Method of Evaluating the Quality of Surface Finish. M. L. Brzhezinskiy. (Stanki i Instrument, 1949, No. 3, 20-22). [In Russian]. In the instrument described and illustrated, the profilograph needle is mechanically drawn over the surface being investigated and its vertical movement causes changes in the size of the aperture through which air leaves a flow system. The change in air pressure are registered on a recording manometer whose drum is rotated by the same motor as that which moves the specimen.—S. K.																									
454.514 METALLURGICAL LITERATURE CLASSIFICATION																									

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Research on the application of the pneumatic method. Trudy VNIIM
no.12:65-86 '51. (MIRA 11:6)
(Physical measurements)

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Length measuring machines having autocollimation optical systems.
Trudy VNIIM no.20:3-4 '53. (MIRA 11:6)
(Length measurement)

BRZHEZINSKIY, M.L.

~~Universal interference comparators.~~ Trudy VNIIM no.26:37-42 '55.
(MIRA 11:6)
(Interferometry)

ABADZHI, K.I.; BOYTSOV, A.N.; VOLOSEVICH, F.P.; GOBERMAN, P.N.; KUTAY, A.K.;
MARINSKIY, F.I.; ODING, G.A.; RUBINOV, A.D.; SHYURMER, G.A.;
BRZHEZINSKIY, M.I., kandidat tekhnicheskikh nauk, retsenzent; PETROV,
V.I., inzhener, retsenzent; KEMPINSKIY, M.M., inzhener, redaktor;
LEYKINA, T.L., redaktor izdatel'stva; POL'SKAYA, R.G., tekhnicheskii
redaktor

[Reference manual for production control in machine building] Spravochnik
po proizvodstvennomu kontroliu v mashinostroenii. Pod obshchei red.
A.K.Kutai. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1956. 670 p, (MLRA 9:12)
(Machinery industry)

BR-HEZINSKIY, M.L.
24(0); 5(4); 6(2)

PHASE I BOOK EXPLOITATION

SOV/2215

Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni
D.I. Mendeleyeva

Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific
Research Abstracts; Collection of Articles, Nr 2) Moscow,
Standartgiz, 1958. 139 p. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Komitet standartov, mer 1
izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers,
and engineers engaged in developing standards, measures, and
gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-
ment and control. The reports were prepared by scientists of
institutes of the Komitet standartov, mer 1 izmeritel'nykh
priborov pri Sovete Ministrov SSSR (Commission on Standards,
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Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIIM - Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I. Mendeleyeva (All-Union Scientific Research Institute of Metrology imeni D.I. Mendeleyev) in Leningrad; Sverdlovsk branch of this institute; VNIK - Vsesoyuznyy nauchno-issledovatel'skiy institut Komiteta standartov, mer 1 izmeritel'nykh priborov (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from MGIMIP - Moskovskiy gosudarstvennyy institut mer 1 izmeritel'nykh priborov (Moscow State Institute of Measures and Measuring Instruments) October 1, 1955; VNIIFTRI - Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physicotechnical and Radio-engineering Measurements) in Moscow; KhGIMIP - Khar'kovskiy gosudarstvennyy institut mer 1 izmeritel'nykh priborov (Khar'kov State Institute of Measures and Measuring Instruments); and NGIMIP - Novosibirskiy gosudarstvennyy institut mer 1 izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments). No personalities are mentioned. There are no references.

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11-2-59

BRZHEZINSKIY, M.L.

Видеомагнитофон: 1 лаборатория измерений в машиностроении; магнитофонный
аппарат, no. 2 (для измерения скорости и Engineering Measurements in Machinery
Department) University Collection, No. 2) Moscow, March 1960. 342 p.
Книга 110 листов. 5,000 copies printed.

PLANS I BOOK EVALUATION 607/4438

Ed.: A.I. Yashin, Doctor of Technical Sciences, Professor, Editorial Council;
A.I. Yashin (Chairman); B.A. Tyts, Doctor of Technical Sciences, Professor;
to: I. Volodin, Doctor; B.A. Gusev, Doctor; P.M. Dobrynin, Doctor; and O.Ya.
Korotkiy (Scientific Secretary); Engineer, Engineer: M. Ya. Korotkiy, Doctor
of Technical Sciences, Professor; Ed.: B.A. Tyts; V.P. Korotkiy, Candidate
of Technical Sciences, Doctor; L.N. Voronov, Candidate of Technical Sciences;
B.A. Gusev, Candidate of Technical Sciences and Instrument Construction (Machinery);
B.A. Tyts, Professor; Editor: B.A. Tyts; Editor: G.Y. Korotkiy; Tech. Ed.:
I.P. Sokolov.

NOTE: This collection of articles is intended for scientific and technical
personal dealing with problems of instrumentability and engineering measurements
in the machine and instrument industries.

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[Engineer].

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inzh., retsenzent; BRZHEZINSKIY, M.L., ~~kand. tekhn. nauk~~,
red.; CHFAS, M.A., red. izd-va; SOKOLOVA, ~~red.~~, tekhn. red.

[Brief manual for inspectors and master workers of a
machinery plant] Kratkii spravochnik kontrol'nogo mastera
mashinostroitel'nogo zavoda. Moskva, Mashgiz, 1961. 287 p.
(MIRA 15:2)

(Machinery industry) (Production control)

BRZHEZINSKIY, M.L.

Interference measurement of hatched line standards. Izv. tekhn.
no. 2:16-18 F '63. (MIRA 16:2)

(Interferometry)

ABADZHI, K.I.; BOYTSOV, A.N.; VOLOSEVICH, F.P.; GOBERMAN, P.N.;
KEMPINSKIY, M.M.; KUTAY, A.K.; HARINSKIY, F.I.; ODING,
G.A.; TAYTS, B.A.; RUBINOV, A.D.; SHTYURMER, G.A.;
BRZHEZINSKIY, M.L., kand. tekhn. nauk, retsenzent;
SHALAYEVSKIY, O.V., red.; LEYKINA, T.L., red.izd-va;
SPERANSKAYA, O.V., tekhn. red.

[Handbook on production control in the machinery industry]
Spravochnik po proizvodstvennomu kontroliu v mashinostro-
enii. Izd.2., perer. i dop. Moskva, Mashgiz, 1964. 748 p.
(MIRA 17:3)

YURASOVA, V. Ye.; LEVIKINA, L. M.; ERZHEZINSKIY, V. A.

"Elektronenmikroskopische Untersuchung dünner Halbleiterschichten von
Typ A_{III}B_V, erzeugt mittels Kathodenzerstaubung."

report submitted for 3rd European Regional Conf, Electron Microscopy,
Prague, 26 Aug-3 Sep 64.

L 12923-65 EWT(1)/EWG(k)/EWT(m)/T/EWP(t)/EWP(b) Pz-6 IJP(c) JD/JG/AT
SSD/AFWL/ASD(a)-5/BAEM(a)/ESD(gs)/ESD(t)

ACCESSION NR: AP4045295

S/0048/64/028/009/1431/1435

AUTHOR: Yurasova, V.Ye.; Levykina, L.N.; Brzhezinskiy, V.A.

TITLE: Sputtering of single crystals of III-V type semiconductors / Report, Tenth Conference on Cathode Electronics held in Kiev, 11-18 Nov 1983

SOURCE: AN SSSR. Investiya. Seriya fizicheskaya, v.28, no.9, 1984, 1431-1435

TOPIC TAGS: cathode sputtering, single crystal, semiconductor, indium antimonide, gallium arsenide

ABSTRACT: Sputtering of single crystals of InSb and GaAs was investigated. These materials were chosen for study partly because of their technical importance, and partly to extend our knowledge of sputtering anisotropy to more complex crystal structures than the simple cubic structures previously investigated. It was also desired to obtain information concerning the relative sputtering rates of the different components of a compound. A sphere cut from a single crystal of the material under investigation was held at a negative potential of 1 to 3 kV in a plasma (pressure - 10^{-3} mm Hg; ion density - 10^{12} cm $^{-3}$; composition - unspecified), and the sputtered material was collected on the inner wall of a spherical glass shell sur-

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ACCESSION NR: AP4045295

rounding the sample. The current density was of the order of 1 mA/cm^2 , and the duration of the sputtering was 30 min for InSb and 5 to 6 hr for GaAs. The composition of the sputtered material, which was deposited mainly in the direction of certain crystallographic axes, was determined chemically, spectroscopically, and by means of electron diffraction. In addition to the usual circular spots of sputtered material, hexagonal spots were formed. These were centered in the $[111]$ directions, and their corners were in the 110 and $11\bar{4}$ directions. The hexagonal spots were more clearly developed for InSb than for GaAs. In the $[111]$ directions the pattern was different: the $[111]$ spots were very weak and the $[11\bar{4}]$ spots were absent. It was determined by auxiliary experiments with dendritic crystals that the $[111]$ directions, giving the hexagonal spots, correspond to the indium faces of the crystal. The general background of sputtered material and the spots formed in the $[111]$ directions were found to consist only of the compound InSb. The hexagonal spots consisted also mostly of InSb, but they contained admixtures of free In in the $[111]$, $[110]$ and $[11\bar{4}]$ directions. Free In was also found in the deposit in the $[1\bar{1}0]$ (antimony) direction of dendritic crystals. The results are discussed in terms of the focusing effect in collisions within crystals (R.H.Silsbee, J.Appl.Phys.28,1246, 1957). It is concluded that not only the focusing effect, but also collisions near the surface are important. No satisfactory explanation was found for the difference

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ACCESSION NR: AP4045295

6
between the patterns in the [111] and [111] directions, nor for the preferential sputtering of indium in the [110] direction. "In conclusion, we express our gratitude to G.V.Spiyak for his interest in the work and for valuable remarks, to M.S. Mirgolovskaya, N.Ya.Dashevskiy and Ye.G.Valyashko for making the dendritic InSb available and for valuable consultations, and also to V.V.Shakhmanov for his assistance in the electron diffraction studies." Orig.art.has: 6 figures.

ASSOCIATION: Fizicheskiy fakultet Moskovskogo gosudarstvennogo universiteta (Physics Department, Moscow State University)

SUBMITTED: 00

ENCL: 00

SUB CODE: EC, SS

NR REF SOV: 003

OTHER: 006

3/3

L 10613-65 EWT(l)/EWG(k)/EWT(m)/EPA(sp)-2/EFT(n)-2/EPA(w)-2/T/EWA/EWP(b)- Pu-4/
Pz-6/Pab-24 IJP(c)/RAEM(a)/ASD(a)-5/AFWL/ESD(t)/RAEM(t) AT/JD

ACCESSION NR: AP4045304

S/0048/64/028/009/1478/1482

AUTHOR: Brzhezinskiy, V.A.; Yurasova, V.Ye.

TITLE: Some peculiarities of sputtering of metals connected with depth of formation of the recoil atoms /Report, Tenth Conference on Cathode Electronics held in Kiev, 11-18 Nov 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.9, 1964, 1478-1482

TOPIC TAGS: cathode sputtering, single crystal, polycrystal, copper

ABSTRACT: The relative rate of sputtering of copper single crystals was measured as a function of the angle between the direction of the incident ions and the [110] axis of close packing, and the sputtering rate of polycrystalline copper was determined as a function of the temperature and the incident ion energy. The measurements were undertaken to check qualitative conclusions drawn from the focused collision theory of sputtering (R.H.Silshes, J.Appl.Phys.28,1246,1957). The measurements with single crystals were performed with spherical specimens and with cylinders cut with their bases parallel to the (100) planes. The spherical specimens were exposed to a hydrogen or krypton plasma at 10^{-3} mm Hg while being held at a negative potential of

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ACCESSION NR: AP4045304

1 to 6 kV. The relative rates of sputtering of different parts of the surface were determined by measuring the shape and dimensions of the specimen after exposure. It was found that sputtering was most rapid in those parts of the specimen at which a [110] axis was normal to the surface. Since there are 12 such locations on the sphere, it was possible to determine the sputtering rate only for rather small inclinations of the [110] axis to the normal. The cylindrical specimens were bombarded locally by a 20 keV neon ion beam incident normal on the cylindrical surface. The specimen was rotated about its axis, and the sputtering rates for different orientations were determined from the density of the sputtered material deposited on a mica surface. With this arrangement it was possible to measure sputtering rates at much larger inclinations of the normally incident beam to the [110] axis. The sputtering rate was found to decrease rapidly with increasing inclination. The polycrystalline samples were sputtered at 200 and 800°C in a hydrogen plasma at potentials from 1 to 6 kV and by neon ion beams of energies from 15 to 30 keV. The sputtering rate was determined from the density of sputtered material deposited on glass. It was found that the maximum sputtering rate occurred for a lower incident ion energy at the higher temperature. Neither the curves nor the extent of the shift of the maximum are given. The results are discussed briefly. The reduction of the sputtering rate when the [110] axis is highly inclined to the normal to the crystal sur-

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ACCESSION NR: AP4045304

face is ascribed to the greater distance along this axis that the chain of focused collisions, originating at a given depth within the crystal, must propagate in order to reach the surface. The effect of elevated temperature is attributed to an increased scattering of these chains. "In conclusion, the authors express their deep gratitude to Prof. G.V. Spivak for his constant interest in the work and for numerous valuable remarks, to Engineers Ye.N. Ry*ak and A.I. Aksenov for assistance in the work, and also to scientific coworkers I.V. Telegina and V.V. Zubenko for determining the orientation of the copper crystals." Orig.art.has: 1 formula, 3 figures and 1 table.

ASSOCIATION: Fizicheskii fakul'tet Moskovskogo gosudarstvennogo universiteta (Physics Department, Moscow State University)

SUBMITTED: 00

ENCL: 00

SUB CODE: EC,NS

MR REF SOV: 003

OTHER: 010

3/3

ACCESSION NR: AP4043618

S/0056/64/047/002/0473/0475

AUTHORS: Yurasova, V. Ye.; Brzhezinskiy, V. A.; Ivanov, G. M.

TITLE: Anisotropy of reflection of argon ions from single crystal copper

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 473-475

TOPIC TAGS: argon, copper, anisotropy, crystal lattice structure, single crystal, cubic crystal, ion bombardment

ABSTRACT: This investigation was undertaken to check on an earlier grapho-analytic calculation made by one of the authors (V. Ye. Yurasova, Izv. AN SSSR, seriya fiz., v. 28, 9, 1964). According to this calculation, the projections of the reflected-ion-yield maxima on the (100) plane should lie symmetrically on both sides of each of the close-packing directions [110] and [100] in that plane, and the angular separation between them should be $\sim 45^\circ$; the reflection

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minima should correspond to the directions [110] and [100]. To check this hypothesis, the angular distribution was investigated of the ions reflected following bombardment of a (100) surface of a copper single crystal with argon ions at ~ 1.5 keV energy. The test setup is briefly described. The results have shown that the regularity of the crystal lattice influences the intensity of the ion reflection. The minimum of the reflection is observed in the direction of close atomic packing [110] and [100], with the ion reflection having a maximum between these two directions. The results obtained are in good agreement with the conclusions of the earlier grapho-analytic calculations and can be interpreted by assuming that the ions penetrate open channels along the close-packing directions in the face-centered cubic lattice. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

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ACCESSION NR: AP4043618

SUBMITTED: 20Mar64

ENCL: 01

SUB CODE: NP, SS

NR REF SOV: . 001

OTHER: 006

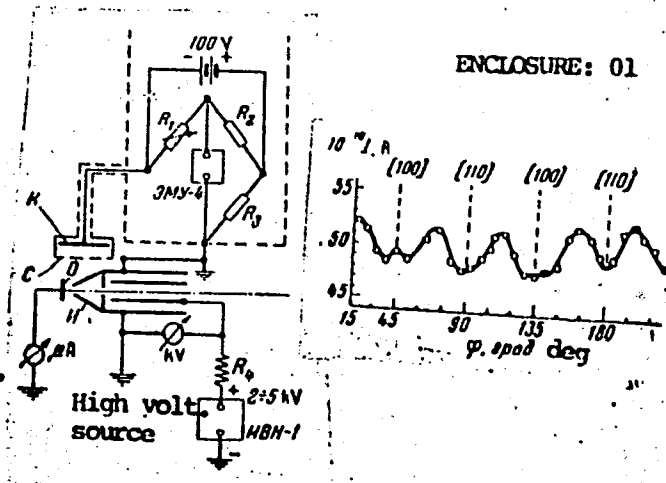
Card 3/4

ACCESSION NR: AP4043618

Left - experimental set-up

M - ion source, K - collector
C - grid, O - specimen
ЭМУ-4 - electrometric amplifier

Right - distribution of Ar ions
reflected from the (100) surface
of a copper single crystal,
relative to the horizontal angles.
Dashed lines show close-packing
direction in the (100) plane



L 21995-66 EWT(m)/EWP(t IJP(c) JD

ACC NR: AP6006967 SOURCE CODE: UR/0368/66/004/002/0174/0176

AUTHOR: Mikhaylin, V. V. ; Brzhezinskiy, V. A.

ORG: none

TITLE: The production of thin films of activated CaS by the cathode sputtering method

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 2, 1966, 174-176

TOPIC TAGS: thin film, calcium sulfide, crystal phosphor, luminescence spectrum

ABSTRACT: In view of the interest shown in the structure of the fundamental absorption of crystals in the group IIA-VIB, there arose a need for the production of thin films of these substances with a layer less than 0.2μ thick. The present authors use the method of cathode sputtering for the production of CaS, one of the compounds of the group. The procedure and the equipment used in the experiments are described. Experiments on the transference of a calcium sulfide-based crystal phosphor (CaS-Bi, Mn) showed that the film produced after annealing in a vacuum at 400-600C, on excitation in the 270 nm region exhibited luminescence similar to that of the initial substance. This confirms the possibility of producing thin luminescent films of multicomponent systems by the method

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ACC NR: AP6006967

employed. The method may also be used successfully for the production of thin films and other compounds in the IIA-VIB group. Orig. art. has: 2 figures.

SUB CODE: 07, 20 / SUBM DATE: 14Apr65 / ORIG REF: 004 / OTH REF: 003

Card 2/2

FV

BRZHEZHINSKIY, Yu., aspirant

The fleet should use combined professions. Mor. flot 22 no.8:39
Ag '62. - (MIRA 15:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut morskogo
flota.

(Merchant seamen)

BRZHEZHINSKIY, Yu., mladshiy nauchnyy sotrudnik

Further improvement of the bonus system for crews. Mor. flot. 25
no.2:19-20 F '65. (MIRA 18:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut morskogo flota.

BRZHNEZHINSKI, Yu.I.

Results of the first stage of regulating the salaries of
the crews of the merchant marine. Trudy TSNIIMF no.61:
88-99 1/4.

(MIRA 19:1)

~~BRZHEZITSKIY, I. M.~~

Dissertation: "Investigation of the Chemical Composition of Oil Fractions of Nebit Dag Paraffin Petroleum." Cand Chem Sci, Azerbaydzhan State U imeni S. M. Kirov, 18 May 54. Bakinskiy Rabochiy, Baku, 9 May 54.

SO: SUM 284, 26 Nov 1954

GUKHMAN, L.A.; BRZHEZITSKAYA, L.M.

Oils obtained from the Hebit-Dag paraffin-base crude. Izv. vys.
ucheb. zav.: neft' i gaz no. 3:89-95 '58. (MIRA 11:7)

1. Azerbaydzhanskiy industrial'nyy institut im. M. Azizbekova.
(Ashkhabad District--Petroleum--Analysis)

MEKHTIYEV, S.D.; RZAYEV, M.I.; ABDULLAYEVA, L.R.; BRZHEZITSKAYA, L.M.

Isomerization of halo-substituted alkanes under the action of
aluminum chloride. Azerb.khim.sbur. no.5:85-89 '62. (MIRA 16:5)
(Paraffins) (Isomerization) (Aluminum chloride)

MEKHTIYEV, S.D.; BRZHEZITSKAYA, L.M.; KULIYEVA, F.T.

Condensation of tertiary butyl chloride with allyl chloride.
Azerb.khim.zhur. no.4:14-16 '65.

(MIRA 18:12)

1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.
Submitted February 1, 1965.

S/152/62/000/006/001/001
B126/B110

AUTHORS: Mekhtiyev, S. D., Brzhezitskaya, L. M., Sadykhova, F. N.

TITLE: Investigation of the reaction of ethylene condensation with monochlorides of butane and pentane

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 6, 1962, 61 - 66

TEXT: The object of these experiments was to obtain primary monochlor-substituted alkanes. The initial material used was tertiary amyl chloride, tertiary butyl chloride, isobutyl chloride and ethylene. Optimum conditions for the condensation of tertiary amyl chloride with ethylene were established as follows: temperature -50°C , at which a yield of 81% is obtained; amount of catalyst 9% of initial chloride; reaction period 1.5 hr. The influence of the molar correlation under these conditions was found to be such that the maximum yield occurs using an ample quantity of ethylene. The product of these condensation tests was a heptylchloride with a boiling range of $146.75 - 196.90^{\circ}\text{C}$. Optimum condensation occurred at 30°C , using 5% of catalyst in the case of tertiary butyl chloride with ethylene

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Investigation of the reaction...

S/152/62/000/006/001/001
B126/B110

(which gave a maximum yield of 79%) and using 10% of catalyst in the case of isobutyl chloride with ethylene. The condensation product was a hexyl-chloride with a boiling point of 116 - 117°C. There are 7 figures and 2 tables. The most important English-language reference is: Bawn CEH J. Inst. Petrol, v. XI, v. 46, No. 443, 1960. ✓

ASSOCIATION: Azerbaydzhanskiy institut nefiti i khimii im. M. Azizbekova
(Azerbaydzhani Institute of Petroleum and Chemistry imeni
M. Azizbekov)

SUBMITTED: January 19, 1962

Card 2/2

MEKHTIYEV, S.D.; RAMADANZADE, Z.M.; BRZHEZITSKAYA, L.M.; KAS'YANOV, V.V.;
MAMEDOVA, Sh.K.

Production of tertiary octylbenzoic acid by the liquid phase
oxidation of octyltoluene with atmospheric oxygen. Azerb. khim.
zhur. no. 2:51-54 '65. (MIRA 18:12)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.
Submitted January 19, 1965.

USSR / Woods and Weed Control.

N

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 1947

Author : Brzhozitskiy, M. V.; Akhmedbeyli, G. A.

Inst : Not given

Title : Characteristics of Germination in Weed Seeds
Harmful to Cultivated Plants in Ansheron
(Vegetables)

Orig Pub : Uch. zap. azerb. un-t, 1957, No 9, 65-70

Abstract : Annual and short-lived weeds predominate.
Perennials play a negligible role. Weed
seeds can be divided into 2 groups: long
latency with short-lived ones and latency
of short duration. These are typical of
annual weeds and partly of perennials. In
order to exterminate weeds which appear in the

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PHASE BOOK I EXPLITATION

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Brzhezyak, Yuriy Davydovich

Pnevmaticheskiye i pnevmogidravlicheskiye zazhimy v prisposobleniyakh (Pneumatic and Pneumohydraulic Clamping-devices in Fixtures) Leningrad, Sudpromiz, 1957. 94 p. 3,500 copies printed. (Nauchno-proizvodstvennyy opyt)

Resp. Ed.: Bozov, A.A.; Ed.: Mishkevich, G.I.; Tech. Ed.: Dvorkovskaya, A.A.

PURPOSE: This brochure is intended for equipment designers, technologists, foremen, and workers in mechanical shops of shipyards and machine-building plants.

COVERAGE: The brochure analyzes designs of air-operated and pneumohydraulic machine-tool fixtures which are either in use or recommended for use under conditions of individual or limited series production. Control

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Pneumatic and Pneumohydraulic Clamping-devices in Fixtures (cont.) 281

apparatus, fittings and schematics of drives are described. Some recommendations for construction and exploitation of these fixtures are given. The text is abundantly illustrated with assembly drawings and diagrams; some design data, such as pressures, forces, GOST standards, dimensions and formulas are also supplied. There are 15 Soviet references.

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AUTHORS: Bzhozovskiy, V. S.; Dul, I.; Fuksiyevich, Ye.; Mikosh, M.; Yang, R.

TITLE: Experimental open-cycle MHD-generator

SOURCE: Teplofizika vysokikh temperatur, v. 2, no. 5, 1964, 771-779

TOPIC TAGS: MHD generator, combustion chamber, heat transfer, combustion chamber wall temperature, regenerative circuit, magnet coil

ABSTRACT: An open-cycle MHD-generator was designed in 1963 for a power output of 1 megawatt. The schematic of the generator is given in the Enclosures. The generator has two combustion chambers: a 100-300 kw capacity and a 1000 kw capacity. The first uses oxygen, nitrogen, or air and kerosene fuel with the incoming air preheated to 1500C. The interior of the chamber is made of refrax material wound with water-carrying copper tubes for cooling. The maximum wall temperature permitted is 1700C. To enhance ionization, potassium is used as seed material in the form of alcohol solution of KOH. Fuel consumption ranges between 12-25 kg/hr. Only a brief description is given of the 1000 kw capacity combustion chamber which was operated for 100 hours at half-capacity. The power system also contains a regenerator for heating air up to 1100C, using the hot exhaust (2000C)
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